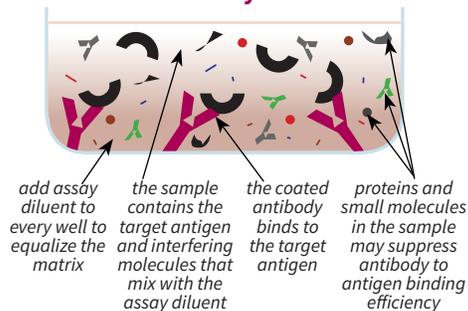# IgM-Reducing Assay Diluent

Minimizes sample matrix differentials and IgM-associated false positive signal.

IgM-Reducing Assay Diluent is formulated to ensure a more accurate and consistent ELISA performance when testing serum and plasma samples in all sandwich ELISA formats. This novel assay diluent utilizes special reducing agents to minimize IgM-associated false positive signal. Rogue IgM in samples can mediate non-specific bridging of the HRP conjugate to coated and blocked ELISA plate surfaces, creating confusing false positive signal that can easily invalidate any ELISA-derived sample data.

Equalize the matrix with an assay diluent

add assay diluent to every well to equalize the matrix

the sample contains the target antigen and interfering molecules that mix with the assay diluent

the coated antibody binds to the target antigen

proteins and small molecules in the sample may suppress antibody to antigen binding efficiency

IgM-Reducing Assay Diluent provides a mechanism for equalization of matrix complexity differences between the standard curve diluent and test samples, which would otherwise result in under-recovery of the target analyte present in sample wells. Complex and concentrated protein environments (the matrix) present in serum or plasma samples, unlike the simple matrix of the standards, will greatly reduce the antigen-binding efficiency of the plate-adsorbed antibodies, resulting in a gross underestimation of the amount of target analyte present in the test samples. This serious issue common to serum and plasma ELISA format assays may be addressed with the use of an appropriate assay diluent. IgM-Reducing Assay Diluent also contains additives to inhibit complement and thrombin activity present in serum and plasma samples.

To use, simply add 50-100 µL to every well of the ELISA plate, including all wells designated for standards, controls, and samples. Then add the standards, controls, and samples to the plate. An antimicrobial agent is included in the product formulation to allow for room temperature bench-top use and extensive storage stability at 2-8°C.

IGM-REDUCING ASSAY DILUENT

Size	Catalog #
100 mL	#623
500 mL	#624
1 L	#625
10 L	#672

INSTRUCTIONS:

1. Dilute the standard curve, controls, and the samples as necessary. ICT offers several formulations of sample diluents in which to prepare the samples.

2. Pipette 50-100 µL IgM-Reducing Assay Diluent per well into every well of the plate.

3. Pipette 50-200 µL of each standard, control, and sample into the plate.

4. Run the rest of the assay according to the specific ELISA protocol.

5. Analyze the data. Because all the wells, including the standards and controls, received the same volume of assay diluent, there is no need to account for this dilution when calculating the results.

For more ELISA protocols and information, please visit www.immunochemistry.com.

SPECIFICATIONS:
• Clear to cloudy, slightly white liquid
• 1X ready to use
• pH 6.4-6.6

STORAGE:
• Shelf life is 18 months at 2-8°C
• 1 week at room temperature

SAFETY & USAGE:
• **Danger!**
• Contains ≥ 3 - < 5% sodium metabisulfite
• Causes serious eye damage
• Product also includes ≤ 0.1% sodium azide
• SDS available at immunochemistry.com
• Not for human or drug use
• For research use only

Build a better assay with ELISA Solutions from ImmunoChemistry Technologies.

ImmunoChemistry
T E C H N O L O G I E S LLC

BRIGHT MINDS, BRIGHT SOLUTIONS.

ImmunoChemistry Technologies, LLC gratefully acknowledges the significant contributions made by one of its founders, Brian W. Lee, Ph.D in the development of this product, including the creation and illustration of its strategy and protocol.

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